

Title (en)

APPARATUS FOR FORMING ON A STEEL WIRE STRAND A BULGE PROJECTING OUTWARD

Publication

EP 0222141 A3 19871125 (DE)

Application

EP 86113719 A 19861003

Priority

DE 3538919 A 19851102

Abstract (en)

[origin: US4773247A] An apparatus for forming a radially outwardly directed bulge in an axially extending stranded steel wire cable for use as an anchor in a concrete structural component includes a frame with a pair of side walls. A clamping device is mounted on one end of the frame for gripping the stranded cable. The clamping device has two displaceable clamping jaws connected to counter jaws by articulated levers for moving the clamping jaws into the closed or clamped position. The clamping jaws are closed by a piston-cylinder unit mounted in the frame. Spaced from the clamping device on the frame is a sliding carriage with a thrust member into which one end of the stranded cable is inserted. The sliding carriage is connected to the piston-cylinder unit. After the clamping device is closed, the sliding carriage and thrust member are moved toward the clamping device by the piston-cylinder unit and the individual wires of the stranded cable are displaced axially and radially outwardly into a radially extending bulge against the inside surface of an upsetting pipe located between the clamping device and the thrust member.

IPC 1-7

E04C 5/12

IPC 8 full level

B21F 1/00 (2006.01); **B21F 1/04** (2006.01); **B21F 99/00** (2009.01); **D07B 7/18** (2006.01); **E04C 5/02** (2006.01); **E04C 5/12** (2006.01)

CPC (source: EP US)

D07B 7/187 (2015.07 - EP US); **E04C 5/125** (2013.01 - EP US); **Y10T 29/4989** (2015.01 - EP US)

Citation (search report)

- [A] FR 1084657 A 19550121
- [A] US 4237942 A 19801209 - DIETRICH HANS [CH]
- [A] FR 2411934 A1 19790713 - HOLZMANN PHILIPP AG [DE]
- [A] FR 1548330 A 19681206
- [AD] DE 3207957 A1 19830915 - DYCKERHOFF & WIDMANN AG [DE]
- [A] US 3824653 A 19740723 - SHOLLER R

Designated contracting state (EPC)

AT BE CH DE ES FR GR IT LI NL

DOCDB simple family (publication)

EP 0222141 A2 19870520; EP 0222141 A3 19871125; EP 0222141 B1 19890607; AT E43876 T1 19890615; CA 1255999 A 19890620; DE 3538919 A1 19870521; DE 3538919 C2 19871223; DE 3663830 D1 19890713; ES 2009753 B3 19891016; GR 3000147 T3 19901129; JP H0238049 B2 19900828; JP S62107835 A 19870519; NO 864012 D0 19861008; NO 864012 L 19870504; US 4773247 A 19880927

DOCDB simple family (application)

EP 86113719 A 19861003; AT 86113719 T 19861003; CA 521893 A 19861031; DE 3538919 A 19851102; DE 3663830 T 19861003; ES 86113719 T 19861003; GR 890400162 T 19890907; JP 25872786 A 19861031; NO 864012 A 19861008; US 92331486 A 19861027